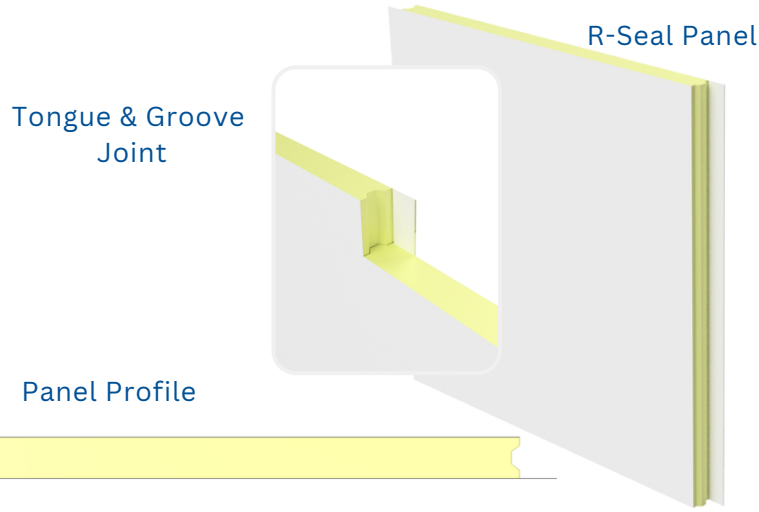




# 2.5" & 3" R-Seal Rigid Envelope Insulation Panel

**POWERHOUSE**  
BUILDING PRODUCTS

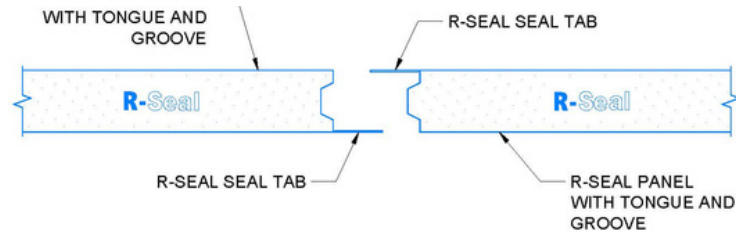
R-Seal is a comprehensive proprietary insulation system specifically designed for metal building owners and erectors. R-Seal provides the highest value in the industry by exceeding energy code and air/water barrier requirements for continuous insulation at the lowest installed cost.



## PRODUCT SPECIFICATIONS

WIDTH COVERAGE	3'-5 3/4" / 3.479'
THICKNESS	2.5" & 3"
*STANDARD LENGTH	8'-0" TO 53'-0"
EXTERIOR PROFILE	PS (Polypropylene/Scrim) Bonded to rigid foam
EXTERIOR FACE	Uniformed Dimpling Pattern
INTERIOR PROFILE	PS (Polypropylene/Scrim) Bonded to rigid foam
INTERIOR FACE	Uniformed Dimpling Pattern
JOINT	Tongue & Groove
FASTENING	Through fastened with support channels at finished floor and eave areas
CORE	Rigid closed cell modified Polyurethane/PUR/PIR core, structural and fire rated components between fiber-reinforced polypropylene

## R-Seal Tape Tab Detail



## R-Value and U-Factor

R-Value	U-Factor	Thickness/Inches	Joint Style
R-15	0.064	2.0"	Butt
R-18.75	0.053	2.5"	Tongue & Grooved
R-22.5	0.044	3.0"	Tongue & Grooved
R-30	0.031	4.0"	Ship Lap
R-37.5	0.027	5.0"	Ship Lap

\*Custom Length Panels are Available Upon Request\*

# TESTING: R-Seal: Rigid Envelope Insulation Panel

TEST / APPROVAL	TEST METHOD	TEST TITLE	RESULTS
Fire US	ASTM E84	Surface Burning Characteristics of Building Materials	Class A Listed Flame Spread FSI <25 Smoke Developed <450
	R-Seal E84 Actual Tested	Composite product flame-spread and smoke--developed tested actual performance	Flame Spread FSI <5 Smoke Developed <250
	ASTM 1715	Full-Scale Fire Testing	PASS
Fire Canada	CAN/ULC S102	Surface Burning Characteristics of Building Materials and Assemblies	Class A Listed Flame Spread FSI <25 Smoke Developed <450
	CAN/ULC S138	Full-Scale Fire Testing	PASS
Structural Performance	OSHA Drop Test Standard 1926.502(c)(4)(i)	Fall Protection for Walking-Working Surfaces	PASS
Air Barrier	ASTM E283 Assembly	Tested Method for Determining Rate of Air Leakage	PASS / 0.04 CFM/ft <sup>2</sup> at 75 PA
	ASTM E283 Assembly Actual Tested	Tested Method for Determining Rate of Air Leakage	0.013 CFM/ft <sup>2</sup> at 75 PA
	ASTM E779 Whole Building Test	Tested Method for Determining Rate of Air Leakage	PASS / 0.4 CFM/ft <sup>2</sup> at 75 PA
	ASTM E779 Whole Building Tested	Tested Method for Determining Rate of Air Leakage	*Average 0.1 CFM/ft <sup>2</sup> at 75 PA
Water Infiltration	ASTM E331	Tested Method for Water Penetration	15 min @ 2.86 psf / PASS 2 hr @ 6.24 psf / PASS
Thermal Performance	ASTM C518-15	<p>Tested in accordance with: <b>ASTM C518-15</b> Thermal Transmission by means of the heat flow apparatus.</p> <p>Tested at Mean temperature of 75 degrees. - Thermal Resistance "R" per inch: <b>7.5</b>            Tested at Mean temperature of 55 degrees. - Thermal Resistance "R" per inch: <b>7.7</b>            Tested at Mean temperature of 20 degrees. - Thermal Resistance "R" per inch: <b>8.7</b></p>	
Compression Strength	ASTM D1621	Tested Method for Determining Compressive Strength	31 - psi Perpendicular

\*Based on Field Testing